

CALFED BAY-DELTA PROGRAM**Office Memorandum**

Date: November 14, 1995

To: Steve Yaeger

From: Michael Norris

Subject: Summary memo on assumptions that were made for future water conservation measures as they applied to 1994 publication of Bulletin 160

As per your instructions, I have conducted an investigation into what assumptions were made for future water conservation efforts by region for the publication of Bulletin 160 and to give some examples.

Present and projected urban water use by hydrologic regions for the years 1990, 2000, 2010, and 2020 are discussed beginning in Chapter 6 on page 141 (Volume 1) of Bulletin 160. Table 6-8 on page 154 lists the projected values. The values given are gross per capita water use values that include the residential, commercial, industrial, and governmental sectors. Table 6-8 includes estimates of water use reductions caused by implementing Best Management Practices (BMPs) that are listed in Table 6-3 on page 145. The BMPs were based on those adopted by Metropolitan Water District (MWD) according to Ed Craddock from DLA (327-1655). Other potential BMPs are listed in Table 6-12 on page 157 but the "potential BMPs" were not credited for any forecasted water use reductions in Bulletin 160. The reduction due to BMPs ranged from 7 to 10 percent of the forecasted per capita use. Table 6-10 on page 155 gives applied water reductions in thousands of acre-feet by hydrologic regions for the year 2020. Reductions can occur from less applied water or by depletion reductions through the implementation of BMPs and Table 6-10 lists both types. The above discussed reductions are offset by increased water demand due to population growth or by a drought occurring which result in less rainfall recharging soil moisture in urban landscapes. The increase in water demand through the year 2020 is given in Table 6-11 on page 156. A depletion savings of 2.7 million acre-feet through the year 2020 is offset by an increase in applied water demand of 4.9 million acre -feet.

Chapter 7 of Bulletin 160 discusses agricultural water use beginning on page 159. Agricultural water demands are given in Table 7-15 on page 184. Efficient Water Management Practices (EWMPs) are the equivalent of BMPs for agriculture and they are listed in Table 7-11 on page 175. According to Craddock, all crop irrigation in the year 2020 is assumed to reach a crop distribution uniformity (DU) of 80 percent meaning the applied water is applied more uniformly which indicates very tight management. Overall, 2.3 million acre-feet of water is expected to be saved through applied agricultural water demand reduction through the year 2020.

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